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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/549,986	09/19/2005	Norio Sakai	36856.1370	3417
54066 7590 11/16/2007 MURATA MANUFACTURING COMPANY, LTD. C/O KEATING & BENNETT, LLP 8180 GREENSBORO DRIVE SUITE 850 MCLEAN, VA 22102			EXAMINER VU, HUNG K	
			ART UNIT 2811	PAPER NUMBER
			NOTIFICATION DATE 11/16/2007	DELIVERY MODE ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

JKEATING@KBIPLAW.COM  
uspto@kbiplaw.com

**Office Action Summary**

Application No.

10/549,986

Applicant(s)

SAKAI ET AL.

Examiner

Hung Vu

Art Unit

2811

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 09 August 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 10-35 is/are pending in the application.
- 4a) Of the above claim(s) 17-22 and 30-35 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 10-16 and 23-29 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 09/19/05, 01/09/06, 08/22/07, 12/22/06
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Election/Restrictions*

Applicant's election without traverse of Invention of Embodiment 4 of Figures 4 and 6, Claims 10-16 and 23-29 in the reply filed on 08/09/07 is acknowledged.

Claims 17-22 and 30-35 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected Invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 08/09/07.

### *Specification*

The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 10-15 and 23-28 are rejected under 35 U.S.C. 102(b) as being anticipated by Takehara et al. (US 2003/0071350, of record).

Takehara et al. discloses, as shown in Figures 1-9, a ceramic multilayer substrate comprising:

a ceramic laminate (2) including a plurality of ceramic layers, having a first main surface (bottom surface of layer 2), and including internal circuit elements (8,9) disposed inside of the laminate;

a resin layer (10) having a bonding surface (upper surface of 10) in contact with the first main surface of the ceramic laminate and a mounting surface (lower surface of 10) opposite to the bonding surface;

external electrodes (4), each disposed on the mounting surface of the resin layer and electrically connected to at least one of the internal circuit elements of the ceramic laminate;

at least one of a ground electrode, a dummy electrode, and a capacitor electrode (13) disposed at an interface between the first main surface of the ceramic laminate and the bonding surface of the resin layer.

Regarding claim 11, Takehara et al. discloses the at least one of the ground electrode, the dummy electrode and the capacitor electrode includes a metal that is integral with the ceramic laminate [Figures 1-9].

Note that the terms “laminate” and “sintered” are method recitations in a device claimed.

“[E]ven though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process.” *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985).

Regarding claims 12 and 25, Takehara et al. discloses the substrate further comprising a first circuit component (1a,1b,1c) mounted on the first main surface and covered with the resin layer, wherein the at least one of the ground electrode, the dummy electrode and the capacitor electrode are disposed on a side that is closer to the mounting surface than the first circuit component [Figures 1-9].

Regarding claims 13 and 26, Takehara et al. discloses the first circuit component is disposed within a region defined by projecting the at least one of the ground electrode, the dummy electrode and the capacitor electrode on the first main surface [Figures 1-9].

Regarding claims 14 and 27, Takehara et al. discloses the substrate further comprising relay electrodes (not shown, section [0034]) disposed so as to extend along the first main surface, wherein electrical connection from the external electrodes to the internal circuit elements are provided through the relay electrodes[Figures 1-9].

Regarding claims 15 and 28, Takehara et al. discloses the ceramic laminate comprises a second main surface (upper surface of 2) on an opposite side to the first main surface and a second circuit component (3) is mounted on the second main surface [Figures 1-9].

Regarding claim 23, Takehara et al. discloses, as shown in Figures 1-9, a ceramic multilayer substrate comprising:

a ceramic laminate (2) including a plurality of ceramic layers, having a first main surface (bottom surface of layer 2), and including internal circuit elements (8,9) disposed inside of the laminate;

a resin layer (10) having a bonding surface (upper surface of 10) in contact with the first main surface of the ceramic laminate and a mounting surface (lower surface of 10) opposite to the bonding surface;

external electrodes (4), each disposed on the mounting surface of the resin layer and electrically connected to at least one of the internal circuit elements of the ceramic laminate;

at least one of a ground electrode, a dummy electrode, and a capacitor electrode (13) disposed inside of the resin layer.

Regarding claim 24, Takehara et al. discloses the at least one of the ground electrode, the dummy electrode and the capacitor electrode includes a metal that is integral with the ceramic laminate [Figures 1-9].

Note that the terms “laminate”, “sintered” and “baked” are method recitations in a device claimed.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 16 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takehara et al. (US 2003/0071350, of record).

Takehara et al. discloses the claimed invention including the substrate as explained in the rejection above. Takehara et al. does not disclose a conductive case is disposed on the second main surface to cover the second circuit component. However, as shown in Figure 10, Takehara et al. discloses a conductive case (10) is disposed on a second main surface of a substrate (2) to cover the second circuit components (1,3). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to form the substrate having a conductive case being disposed on the second main surface to cover the second circuit component, such as taught by Figure 10, in order to protect the circuit component from external contamination.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hung Vu whose telephone number is (571) 272-1666. The examiner can normally be reached on Monday to Thursday 6:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynne A. Gurley can be reached on (571) 272 - 1670. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

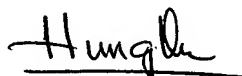
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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Vu

October 27, 2007

A handwritten signature in black ink, appearing to read "Hung Vu", written over a horizontal line.

Hung Vu

Primary Examiner